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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/576,720 | 05/23/2000 | John J. Burns | FEL-001P | 3128 |

7590

02/13/2002

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EXAMINER

PRATT, CHRISTOPHER C

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 02/13/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

AS-3

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/576,720 | JOHN J. BURNS ET AL | |
| | Examiner | Art Unit | |
| | Christopher C. Pratt | 1771 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/29/00.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 22 and 23 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-21, drawn to nonwoven composite, classified in class 442, subclass 57.
 - II. Claims 22-23, drawn to a method or forming a nonwoven fabric, classified in class 156, subclass various.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by another method comprising air jet entangling instead of needling.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with James Robertson on 2/4/02 a provisional election was made with traverse to prosecute the invention of group I, claims 1-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

DETAILED ACTION

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 6-10, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Brooks et al (3683921).

Brooks is concerned with the creation of a nonwoven composite comprising a plurality of layers of nonwoven fiber material. Said composite bonded together by an adhesive and further bonded by mechanical entanglement (col. 8, lines 63-65).

Brooks discloses applicant's claimed fiber materials (col. 3, lines 5-16).

8. (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 1, 5, 8-9, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Stein et al (6287407).

Stein is concerned with the creation of a nonwoven composite structure comprising a plurality of layers of nonwoven fiber material. Said composite bonded together by an adhesive and further bonded by needling (col. 2, lines 47-59).

Said adhesive comprising a thermally bonded fabric incorporated within said nonwoven composite structure.

Said structure comprising layers of different nonwoven material (col. 1, lines 38-41).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2-4, 13, 15-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks et al (3683921).

Brooks does not specify the thickness or density of the composite. It would have been obvious to a person having ordinary skill in the art to utilize applicant's claimed thickness and density in Brooks' laminate. The skilled artisan would have been motivated to vary the thickness and density of the composite by the desire to render the composite suitable for a variety of end-use applications.

With respect to claim 15, it would have been obvious to a person having ordinary skill in the art to utilize a needlepunch treatment in place of water jet entangling. The examiner takes official notice that both process are equivalent in the art. The selection of either on these known equivalents would be within the level of ordinary skill in the art.

12. Claims 2-4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al (6287407).

Stein does not specify the thickness or density of the composite. It would have been obvious to a person having ordinary skill in the art to utilize applicant's claimed thickness and density in Stein's laminate. The skilled artisan would have been motivated to vary the thickness and density of the composite by the desire to render the composite suitable for a variety of end-use applications.

With respect to claim 6, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add additional layers, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. ST. Regis Paper Co. V. Bemis co., 193 USPQ 8. The skilled

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artisan would have been motivated to add additional layers by the desire to increase the thickness and weight of the composite.

Stein teaches that the outer nonwoven fabrics can have different properties (col. 2, lines 26-29), but does specifically state that multiple adhesive layers can be formed having different chemical compositions. It would have been obvious to a person having ordinary skill in the art to utilize multiple adhesive layers having different chemical compositions. Such a modification would have been motivated by the desire to provide the laminate with varied properties, particularly related to cleaning ability. For example, it would be beneficial to provide a stronger adhesive on one side of the composite to be used to scrub harder surfaces.

13. Claims 10-13 and 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al (6287407) in view of either Yazawa et al (4211807) or Stopper et al (5635290).

Stein teaches said adhesive to comprise a meltable nonwoven fabric, but does not teach the use of a meltable scrim. Both Yazawa and Stopper are concerned with the creation of nonwoven composites. Both teach the use of meltable polyamide scrims binding nonwoven layers together (col. 9, lines 38-50 and col. 9, lines 1-5). It would have been obvious to a person having ordinary skill in the art to utilize the scrim layers taught in Yazawa and Stopper in the composite of Stein. Such a modification would have been motivated by the desire to control the amount and placement of the adhesive material used in the composite.

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Stein appears to be completely silent with respect the specific fiber materials used in his composite. Both Yazawa and Stopper, however, teach applicant's claimed fiber materials and deniers. It would have been obvious to a person having ordinary skill in the art to utilize the fiber materials taught in either Yazawa or Stopper. Such a combination would have been necessary to make up for the gaps in Stein's disclosure. The skilled artisan would have been motivated to utilize the various fibers and fiber sizes taught in Yazawa and Stopper by the desire to modify the absorbency and texture of Stein's fabric.


Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Pratt whose telephone number is 703-305-6559. The examiner can normally be reached on Monday - Friday from 7 am to 4 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Christopher C. Pratt
February 9, 2002


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
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